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### **COURSE DESCRIPTION**

Operations Management (OM) involves the systematic planning, design, operation, control, and improvement of businesses processes. The course is conceptually structured as two modules. In the first module, we introduce the basic terminology or vocabulary of OM and focus on process analysis and process design. We address several critical OM issues: management of variability, operational fit and focus, process control and capability, lean operations, quality, and global supply chain management. In the second module, we seek ways in which operations can improve the overall competitiveness of a firm. We explore strategic aspects of OM and issues such as operational excellence, cost competition, learning and improvement, flexibility, operational hedging, role of information technology, new product development, and innovation.

### **COURSE LEARNING OBJECTIVES**

By the end of this course, you should gain an improved understanding of

- the importance of careful design, operation, and improvement of business processes;
- the competitive potential of sound operations management;

and acquire the skills to

- analyze any manufacturing or service business to uncover improvement opportunities;
- make recommendations for improvements along the dimensions of efficiency, quality, and speed.

### **TEACHING/LEARNING METHODOLOGY**

This course is largely a series of case discussions. In class, close your laptop and put it away; open up the case; and have a calculator handy to help with arithmetic. The primary learning materials for the class consist of cases, articles and the following required books:

*Operations Strategy* (ISBN: 0-9759146-6-9, Dynamic Ideas) by Jan A. Van Mieghem. (This is as close to a textbook as we have in this course. But we shall use this book less as a text and more as a reference and a supplementary resource. Please read the assigned sections of this text somewhat lightly at first. Go back for a re-read as you deem useful after we discuss the topic in class.)

*The Goal: A Process of Ongoing Improvement* (Third Revised Edition, ISBN: 0-88427-178-1, North River Press) by E. Goldratt and J. Cox. (This international best seller is a novel that captures many of the critical concepts and issues in operations. According to *Financial Times*, “The only book that [managers] have actually read right through over the years is THE GOAL.” The book is funny yet deep, requiring careful reading.)

*Critical Chain* (ISBN: 0-88427-153-6, North River Press) by E. Goldratt. (This is project management in practice – a la Goldratt.)

In preparing for case discussions, you are strongly encouraged to work with your study group. Suggested questions to help you prepare for case discussions are provided in the syllabus.

You and I will work together to create the best learning environment that we can. Please let me know throughout the semester, individually or collectively, if there is anything I can do to make this class better for you.

### **PERFORMANCE EVALUATION**

The final grade in this class will be based on your demonstrated performance as follows:

Class Contribution	30 %
Group Case Reports (5)	40 %
Final Exam (December 3, Session 11, 8-12)	30 %
Total	100%

The recommended grade point average for this course is 3.5 plus/minus 0.05. Group Case Report assignments will be posted on Blackboard/Assignments. Please use your study group for these assignments. The final exam is an in-class individual case-analysis assignment. A sample final exam will be posted on Blackboard/Assignments.

### **GRADING OF CLASS CONTRIBUTION**

At the end of the semester I shall ask you to assess the class contribution of your peers. Peer assessment will be the primary determinant of your class contribution grade in the course. How should you assess class contribution of your peers? Prof. John Burrows contributed the following:

Grade (These guidelines were made popular by Professor Richard J. Murnane at the Harvard Graduate School of Education. Prof. Murnane learned of them from someone else.)

- A** Contributions in class reflect exceptional preparation. Ideas offered are always substantive, provide one or more major insights as well as direction for the class. Challenges are well substantiated and persuasively presented. If this person were not a member of the class, the quality of discussion would be diminished markedly.
- B** Contributions in class reflect satisfactory preparation. Ideas offered are sometimes substantive, provide generally useful insights but seldom offer a new direction for the discussion. Challenges are sometimes presented, fairly well substantiated, and are sometimes persuasive. If this person were not a member of the class, the quality of discussion would be diminished somewhat.
- C** This person says little or nothing in class. Hence, there is not an adequate basis for evaluation. If this person were not a member of the class, the quality of discussion would not be changed.
- D** Contributions in class reflect inadequate preparation. Ideas offered are seldom substantive, provide few if any insights and never a constructive direction for the class. Integrative comments and effective challenges are absent. If this person were not a member of the class, valuable air-time would be saved.

For the learning process to be effective, you will need to prepare carefully before class and contribute actively during class. Preparation involves both thorough analysis and *developing a personal position on issues* raised in the cases and readings. Unless you have thought about and adopted a personal position, it is very hard to learn from others' contributions in the class. This does not mean that you have "solved" the case, in the sense that you have identified the one best answer to the issues facing the firms and managers in the case. Invariably, given the complexities in the real world, there is no single answer. Instead, thorough preparation means that you read the materials, consider the issues raised by the case and assignment questions, and carry out appropriate analysis in order to arrive at a thoughtful position concerning the options that face the

firms and managers in the case. By actively participating in class discussions, you will sharpen your own insights and those of your classmates.

Conversation Guidelines (Borrowed from *Writing For Scholarly Publication*, by Anne Sigismund Huff):

- i. *Listen before you speak.* Polite conversationalists do not walk up to a group and begin talking. Even if they are quite familiar with the individuals they approach they wait to find out what is being discussed at the moment. Make genuine connections with the important points being made. We are not in conversation mode when we forget to take seriously what has already been said.
- ii. *Connect with points already made.* Inept conversationalists make a passing reference to the current conversation, but move quickly to what they had on their minds before joining the group. The more interesting conversationalist continues to make genuine links to the ideas of others. As a result, the content they intend to share upon arrival is shaped by the conversation, and shapes the conversation. By extension, the generation of new ideas that could only have come from engaging with others is the sign of successful conversation.
- iii. *Be interesting.* We don't listen long to those who repeat previous points in a conversation or are tangential to the main thread of conversation. The good conversationalist thinks about people he or she is talking to, considers what would interest them, edits content to make sure that these connections are clear, and then says something the others have not thought of before. Consider if you were speaking to people you would most like to meet. If you were lucky enough to meet an author in the conversation that interests you, you would not be completely tongue-tied, but would work hard to think of the most interesting thing you could say. You would try to avoid saying what they already know.
- iv. *Be self-critical.* Be critical in your thinking and in your comments, but also try and be constructive and respectful of different points of view (even when you strongly disagree).
- v. *Substantiate your ideas.* Quality of contributions is what matters, not quantity. When you make a statement, be sure you can substantiate and support your statement—this is more important than being right or wrong.

Some of the things that have an impact on effective class contribution are the following:

- ✓ No single individual should dominate the discussion. Make your points, and then let others have a chance to make theirs. An “equal time” rule will be in effect.
- ✓ Is the contributor a good listener? (e.g., a sign is whether the person merely repeats what others have just said)
- ✓ Is the contributor willing to interact with other class members?
- ✓ Are the points that are made relevant to the discussion? Are they linked to the comments of others? Are they linked to current or past course material?
- ✓ Do the comments add to our understanding of the situation?
- ✓ Does the contributor distinguish between different kinds of data (i.e., facts, opinions, beliefs, concepts, etc.)?
- ✓ Is there a willingness to test new ideas, or are all comments, “safe?” For example, repetition of case facts without analysis and conclusions.
- ✓ Can the contributor substantiate and support his/her statements?

**Are the comments critical, but also constructive and respectful of different points of view (even when you strongly disagree)?**

## McCombs Classroom Professionalism Policy

The highest professional standards are expected of all members of the McCombs community. The collective class reputation and the value of the Texas MBA experience hinge on this.

Faculty are expected to be professional and prepared to deliver value for each and every class session. Students are expected to be professional in all respects.

### **The Texas MBA classroom experience is enhanced when:**

- **Students arrive on time.** On time arrival ensures that classes are able to start and finish at the scheduled time. On time arrival shows respect for both fellow students and faculty and it enhances learning by reducing avoidable distractions.
- **Students display their name cards.** This permits fellow students and faculty to learn names, enhancing opportunities for community building and evaluation of in-class contributions.
- **Students minimize unscheduled personal breaks.** The learning environment improves when disruptions are limited.
- **Students are fully prepared for each class.** Much of the learning takes place during classroom discussions. When students are not prepared they cannot contribute to the overall learning process. This affects not only the individual, but their peers who count on them, as well.
- **Students respect the views and opinions of their colleagues.** Disagreement and debate are encouraged. Intolerance for the views of others is unacceptable.
- **Students do not speak unless they are speaking to the entire class.** Unless otherwise instructed by the instructor, please do not engage in private conversations, however short or innocuous, while the class is in progress. They are disruptive and discourteous to the speaker. Raise your hand if you have a question or comment.
- **Laptops are closed and put away.** When students are surfing the web, responding to e-mail, instant messaging each other, and otherwise not devoting their full attention to the topic at hand they are doing themselves and their peers a major disservice. Those around them face additional distraction. Fellow students cannot benefit from the insights of the students who are not engaged. Faculty office hours are spent going over class material with students who chose not to pay attention, rather than truly adding value by helping students who want a better understanding of the material or want to explore the issues in more depth. Students with real needs may not be able to obtain adequate help if faculty time is spent repeating what was said in class. There are often cases where learning is enhanced by the use of laptops in class. Faculty will let you know when it is appropriate to use them. In such cases, professional behavior is exhibited when misuse does not take place.
- **Phones and wireless devices are turned off.** We've all heard the annoying ringing in the middle of a meeting. Not only is it not professional, it cuts off the flow of discussion when the search for the offender begins. When a true need to communicate with someone outside of class exists (e.g., for some medical need) please inform the professor prior to class.

Remember, you are competing for the best faculty McCombs has to offer. Your professionalism and activity in class contributes to your success in attracting the best faculty to this program.

### **Academic Dishonesty**

We have no tolerance for acts of academic dishonesty. Such acts damage the reputation of the school and the degree and demean the honest efforts of the majority of students. The minimum penalty for an act of academic dishonesty will be a zero for that assignment or exam.

The responsibilities for both students and faculty with regard to the Honor System are described on <http://mba.mcombs.utexas.edu/students/academics/honor/index.asp> and on the final pages of this syllabus. As the instructors for this course, we agree to observe all the faculty responsibilities described

therein. During Orientation, you signed the Honor Code Pledge. In doing so, you agreed to observe all of the student responsibilities of the Honor Code. If the application of the Honor System to this class and its assignments is unclear in any way, it is your responsibility to ask us for clarification.

As specific guidance for this course,

- (1) Do not use case solutions from previous semesters or from other sources.
- (2) The group case reports should be prepared without any help from outside your group.
- (3) The final exam is strictly an individual assignment.
- (4) Group study for learning the course material is encouraged. Group preparation for case discussions and the final examination is acceptable and encouraged.

### **Students with Disabilities**

Upon request, the University of Texas at Austin provides appropriate academic accommodations (SSD) is housed in the Office of the Dean of Students, located on the fourth floor of the Student Services Building. Information on how to register, downloadable forms, including guidelines for documentation, accommodation request letters, and releases of information are available online at <http://deanofstudents.utexas.edu/ssd/index.php>. Please do not hesitate to contact SSD at (512) 471-6259, VP: (512) 232-2937 or via e-mail if you have any questions.

### **Honor Code Purpose**

Academic honor, trust and integrity are fundamental to The University of Texas at Austin McCombs School of Business community. They contribute directly to the quality of your education and reach far beyond the campus to your overall standing within the business community. The University of Texas at Austin McCombs School of Business Honor System promotes academic honor, trust and integrity throughout the Graduate School of Business. The Honor System relies upon The University of Texas Student Standards of Conduct (Chapter 11 of the Institutional Rules on Student Service and Activities) for enforcement, but promotes ideals that are higher than merely enforceable standards. Every student is responsible for understanding and abiding by the provisions of the Honor System and the University of Texas Student Standards of Conduct. The University expects all students to obey the law, show respect for other members of the university community, perform contractual obligations, maintain absolute integrity and the highest standard of individual honor in scholastic work, and observe the highest standards of conduct. Ignorance of the Honor System or The University of Texas Student Standards of Conduct is not an acceptable excuse for violations under any circumstances.

The effectiveness of the Honor System results solely from the wholehearted and uncompromising support of each member of the Graduate School of Business community. Each member must abide by the Honor System and must be intolerant of violations. The system is only as effective as you make it.

### **Faculty Involvement in the Honor System**

The University of Texas at Austin McCombs School of Business Faculty's commitment to the Honor System is critical to its success. It is imperative that faculty make their expectations clear to all students. They must also respond to accusations of cheating or other misconduct by students in a timely, discrete and fair manner. We urge faculty members to promote awareness of the importance of integrity through in-class discussions and assignments throughout the semester.

### **Expectations Under the Honor System**

#### **Standards**

If a student is uncertain about the standards of conduct in a particular setting, he or she should ask the relevant faculty member for clarification to ensure his or her conduct falls within the expected scope of

honor, trust and integrity as promoted by the Honor System. This applies to all tests, papers and group and individual work. Questions about appropriate behavior during the job search should be addressed to a professional member of the Career Services Office. Below are some of the specific examples of violations of the Honor System.

### **Lying**

Lying is any deliberate attempt to deceive another by stating an untruth, or by any direct form of communication to include the telling of a partial truth. Lying includes the use or omission of any information with the intent to deceive or mislead. Examples of lying include, but are not limited to, providing a false excuse for why a test was missed or presenting false information to a recruiter.

### **Stealing**

Stealing is wrongfully taking, obtaining, withholding, defacing or destroying any person's money, personal property, article or service, under any circumstances. Examples of stealing include, but are not limited to, removing course material from the library or hiding it from others, removing material from another person's mail folder, securing for one's self unattended items such as calculators, books, book bags or other personal property. Another form of stealing is the duplication of copyrighted material beyond the reasonable bounds of "fair use." Defacing (e.g., "marking up" or highlighting) library books is also considered stealing, because, through a willful act, the value of another's property is decreased.

### **Cheating**

Cheating is wrongfully and unfairly acting out of self-interest for personal gain by seeking or accepting an unauthorized advantage over one's peers. Examples include, but are not limited to, obtaining questions or answers to tests or quizzes, and getting assistance on case write-ups or other projects beyond what is authorized by the assigning instructor. It is also cheating to accept the benefit(s) of another person's theft(s) even if not actively sought. For instance, if one continues to be attentive to an overhead conversation about a test or case write-up even if initial exposure to such information was accidental and beyond the control of the student in question, one is also cheating. If a student overhears a conversation or any information that any faculty member might reasonably wish to withhold from the student, the student should inform the faculty member(s) of the information and circumstance under which it was overheard.

### **Actions Required for Responding to Suspected and Known Violations**

As stated, everyone must abide by the Honor System and be intolerant of violations. If you suspect a violation has occurred, you should first speak to the suspected violator in an attempt to determine if an infraction has taken place. If, after doing so, you still believe that a violation has occurred, you must tell the suspected violator that he or she must report himself or herself to the course professor or Associate Dean of the Graduate School of Business. If the individual fails to report himself or herself within 48 hours, it then becomes your obligation to report the infraction to the course professor or the Associate Dean of the Graduate School of Business. Remember that although you are not required by regulation to take any action, our Honor System is only as effective as you make it. If you remain silent when you suspect or know of a violation, you are approving of such dishonorable conduct as the community standard. You are thereby precipitating a repetition of such violations.

### **The Honor Pledge**

McCombs School of Business requires each enrolled student to adopt the Honor System. The Honor Pledge best describes the conduct promoted by the Honor System. It is as follows:

"I affirm that I belong to the honorable community of The University of Texas at Austin Graduate School of Business. I will not lie, cheat or steal, nor will I tolerate those who do."

"I pledge my full support to the Honor System. I agree to be bound at all times by the Honor System and understand that any violation may result in my dismissal from the Graduate School of Business."

## OPERATIONS MANAGEMENT: DETAILED COURSE OUTLINE

### SESSION 1 (Th, Aug. 19, 1-5) PROCESS FUNDAMENTALS; PROCESS DESIGN

Readings:

1. Chapters 1 & 2 (Van Mieghem);
2. Deep Change: How Operational Innovation Can Transform Your Company
3. National Cranberry Cooperative
4. Benihana of Tokyo

Case : NATIONAL CRANBERRY COOP

Case Questions :

All questions on this case refer to the 'process fruit' operation at RP1 in 1981.

1. In case of resource contention (resource contention occurs when both dry and wet berries are fighting over the same resource), assume that resource capacities will be allocated in a 70:30 ratio to the two types of berries to reflect the percentage of wet berries (70%) expected in 1981. Also assume that these (shared) resource capacities can be reallocated as necessary between dry and wet berries with little or no changeover time. Assume furthermore that the actual processing time of berries is very short. Finally, assume that bulking and bagging capacity is more than adequate.

What are the bottlenecks for dry and wet berry processing? What are the capacities (in barrels per hour) for dry and wet berry processing?

2. Consider a day when 18,000 barrels of berries arrive in trucks between 7 a.m. and 7 p.m. at a constant hourly rate (1,500 barrels/hour). As you know, 70% of the berries are wet. So it is as if wet berries arrive at an hourly rate of 1,050 barrels/hour and dry berries arrive at a rate of 450 barrels/hour during 7 a.m. – 7 p.m. Consider the work schedule in Figure E on page 8. Draw an inventory buildup diagram that tracks berry inventory during the day.

3. If you were to assist Mel O'Brien, what would be your recommendations to Mel? What do you think of the decision last winter to buy a fifth Kiwanee dumper?

Case: BENIHANA OF TOKYO

Case Questions :

1. Compare the operating figures of a typical restaurant with those of Benihana based on the following factors: food and beverage costs, payroll, and rent. Why are costs lower at Benihana?

2. What design choices facilitate dining in less than an hour?

3. It would seem that by the time of Benihana Palace - Rocky's third Manhattan operation, Rocky had discovered that the size of the bar area should be balanced with the size of the dining area. Assuming 120 seats in the dining area, 48 seats in the bar, and a target process time of 60 minutes in the dining area, what target process time is implied for a customer in the bar?

4. What is the Benihana concept? What are Benihana's target markets (internal & external)? Benihana's operating strategy? Benihana's facilities?

**SESSION 2 (Sa, Aug. 21, 8-12)**

**VARIABILITY;  
MANAGEMENT OF QUEUES**

- Readings:
1. Appendix C (Van Mieghem);
  2. Want to Perfect Your Company's Service?
  3. Manzana Insurance

Case : MANZANA INSURANCE

Case Questions:

1. What is the major competitive threat faced by Fruitvale?
2. What bottlenecks are revealed by the utilization analysis shown below?
3. It is commonly believed at Fruitvale that RUNs are the most profitable jobs? Is this belief justified?
4. Consider how TAT (turnaround time) is calculated (page 6 and Exhibit 3). Does this TAT reflect Fruitvale's actual flow time performance? Why or why not?
5. Make a few recommendations to improve Fruitvale's performance.

MANZANA INSURANCE - Utilization Analysis (1991, 120 days, 450 minutes per day)

Service Time Means: (From Exhibit 4)	RUNs	RAPs	RAINs	RERUNs	Average Policy
DC	68.5 mins.	50.0	43.5	28.0	40.97
UT	43.6	38.0	22.6	18.7	28.4 <sup>1</sup>
RT	75.5	64.7	65.5	75.5	70.39
PW	71.0	#N/A	54.0	50.1	54.78
Arrivals (Total): (From Exhibit 7)	350	1798	451	2081	4680

Arrivals Percentage: (From Exhibit 7)

Territory 1	46.3	42.3	43.5	30.6	
Territory 2	28.6	28.5	27.7	40.3	
Territory 3	25.1	29.2	28.8	29.1	
(Total)	100	100	100	100	
Utilizations (%):	RUNs	RAPs	RAINs	RERUNs	Total
DC (4)	11.1 <sup>2</sup>	41.6	9.1	27.0	88.8
UT1	13.1	53.5	8.2	22.1	96.9
UT2	08.1	36.1	5.2	29.0	78.4
UT3	07.1	36.9	5.4	21.0	70.4
RT (8)	06.1	26.9	6.8	36.4	76.2
PW (5)	09.2	07.1 <sup>3</sup>	9.0	38.6	63.9

<sup>1</sup>  $[(43.6)(350)+(38.0)(1798)+(22.6)(451)+(18.7)(2081)]/4680 = 28.4;$

<sup>2</sup>  $[(68.5)(350)/(4)(120)(450)] = 0.111$

<sup>3</sup> 15% RAPs turned into RUNs; assumes mean service time of 71.0 mins.



**SESSION 4 (F, Sep. 17, 1:30-5:30)**

**TOYOTA PRODUCTION SYSTEM;  
QUALITY**

Assignment Due: Group Case Report - 2

- Readings:
1. Chapter 10 (Van Mieghem); Just skim Chapter 4 (Van Mieghem);
  2. Decoding the DNA of the Toyota Production System;
  3. The Lean Service Machine;
  4. Learning to Lead at Toyota;
  5. Toyota Motor Manufacturing

Case: TOYOTA MOTOR MANUFACTURING

Case Questions:

1. Assembly comprises 769 team members, which means 385 per shift covering 353 stations. What does this say about the scale of ‘non-essential’ work? For example, the scale of rework operations?
2. The length of a station is 5.7 meters (Exhibit 6). Given that the cycle time is 57 seconds, what is the speed of the assembly line (in miles per hour)?
3. What is the capacity of the assembly line (cars per day; cars per week; and cars per year) assuming 100% line utilization? How many fewer cars are produced per shift if the run ratio is 95%? How many fewer cars are produced per shift if the run ratio is 85%?
4. This question is designed to estimate how much time KFS has to assemble a seat. Of the 353 stations, at least 314 (353 minus 39 in Groups 2 and 3 in Exhibit 6) are between the end of the paint line and the first seat installation station. What is the corresponding throughput time? After subtracting the time a seat spends: traveling on TMM’s overhead seat conveyor line (about 250 meters), waiting on TMM’s staging line, traveling in the truck, and waiting on KFS’s staging line, you get the time KFS has to assemble a seat. What is the time?
5. “Of all TPS components perhaps the one receiving most notoriety has been workers’ “ability” to stop the line.” What is the cost of stopping the line for one cycle? For half-an-hour?
6. What can Doug do to address the seat quality problem?

**SESSION 5 (F, Oct. 1, 8-12)**

**EXTENDING JUST-IN-TIME;  
GLOBAL SOURCING**

- Readings:
1. Chapters 6, 7 (Van Mieghem);
  2. Aligning Incentives in Supply Chains;
  3. Barilla SpA (A)
  4. Sport Obermeyer

Case: BARILLA SPA (A)

Case Questions:

1. Diagnose the underlying causes of the difficulties that the JITD program was created to solve. What are the benefits and drawbacks of this program?
2. What conflicts or barriers internal to Barilla does the JITD program create? What causes these conflicts? As Giorgio Maggiali, how would you deal with these?
3. As one of Barilla's customers, what would your response to JITD be? Why?
4. In the environment in which Barilla operated in 1990, do you believe JITD (or a similar kind of program) would be feasible? Effective? If so, which customers would you target next? How would you convince them that the JITD program was worth trying? If not, what alternatives would you suggest to combat some of the difficulties that Barilla's operating system faces?

Case: SPORT OBERMEYER

Case Questions:

1. Retailers, designers, sewing factories, fabric dyers/printers, and manufacturers of zippers, buttons and labels are a few of the many players comprising Obermeyer's globally dispersed supply chain for skiwear. How would you characterize the role played by Sport Obermeyer in this supply chain? The role played by Obersport? What are the critical capabilities of Sport Obermeyer? Of Obersport?
2. Wally Obermeyer has hired you as a consultant to advise him on production planning decisions for the Obermeyer product line. As you know, one of the major challenges Wally faces each year is deciding which items to order in November, and which ones to defer till the Las Vegas show. Understand that an item could be ordered in November and again after the Las Vegas show. However, capacity constraints limit Wally's options. Wally wants your help with the sample problem (page 8) and refers you to Exhibit 10. Consider the Isis and Entice styles (Exhibit 10). Which one of these two styles is less risky for early production using non-reactive capacity, and why?  
  
Obermeyer's ability to fine-tune supply of each style is constrained by minimum order quantities. How does the attractiveness/riskiness of a style for early production depend on the minimum order size? Consider the Isis style (Exhibit 10) and the following minimum order size scenarios: (i) 500 units; (ii) 1200 units; and (iii) 800 units. Does the fact that the minimum order size is 500 units (rather than 1200 or 800 units) help you at all in deciding whether to order Isis in November?
3. A number of factors constrain Obermeyer's ability to produce so as to match supply and demand. These include: (1) minimum production lot-size constraints; (2) limited reactive capacity in the sewing plants; (3) raw material lead times; and (4) the time at which retailer demand is made available to Obermeyer. Based on your understanding of the course cases and other class material throughout the semester, discuss how Obermeyer should address these factors so as to improve its ability to produce what the market wants? Specifically, how can Obermeyer increase its reactive capacity without necessarily hiring more people, working longer hours or buying new equipment?

**SESSION 6 (Sa, Oct. 2, 1-5)****SUPPLY CHAIN EXCELLENCE;  
COST COMPETITION**

Assignment Due:

Group Case Report – 3

Readings:

1. Chapter 2 (Van Mieghem);
2. The Triple-A Supply Chain;
3. Supply Chain Management at World Co.;
4. American Connector Company (A)

Case:

**SUPPLY CHAIN MANAGEMENT AT WORLD CO.**

Case Questions:

1. Examine the features of fashion apparel retailing in Japan. How can a company use its supply chain to compete in this environment?
2. Identify salient aspects of World's supply chain focusing on the processes for manufacturing, demand forecasting, and inventory planning.
3. Examine the features of the supply chain that explain the company's remarkably short lead times (relative to U.S. apparel supply chains) and identify why the company is able to respond so effectively.
4. Can the World's supply chain processes be replicated at other apparel companies? What about non-apparel supply chains? Identify potential barriers.

Case:

**AMERICAN CONNECTOR CO.**

Case Questions:

1. How serious is the threat of DJC to American Connector Company?
2. How big are the cost differences between DJC's plant and American Connector's Sunnyvale plant? Consider both DJC's performance in Kawasaki and its potential in the United States.
3. What accounts for these differences? How much of the differences is inherent in the way each of the two companies competes? How much is due strictly to differences in the efficiency of the operations?
4. What should American Connector's management at the Sunnyvale plant do?

**SESSION 7 (Sa, Oct. 16, 8-12)****LEARNING & IMPROVEMENT;  
FLEXIBILITY**

Readings:

1. Chapter 5, 10 (Van Mieghem)
2. ITT Automotive;
3. Ely Lilly & Company

Case:

**ITT AUTOMOTIVE**

Case Questions:

1. What are the implications of automation for both cost and flexibility? Do you agree with the assertion made by one of the managers in the case: "If you automate, you stagnate?"
2. What are your recommendations regarding the issue of standardizing process technology across all plants? Are there motives behind this proposal, other than those stated in the case?
3. As Juergen Geissing, how would you go about implementing your recommendation? How would

you overcome resistance from the plants? As Steve Dickerson, what line of reasoning would you use to convince senior management that full automation is the less desirable alternative?

4. As Klaus Lederer, what option would you like to see pursued? How do various options fit into the broader corporate strategy of ITT Automotive?

Case: ELY LILLY

Case Questions:

1. How has the competitive environment in pharmaceuticals been changing over the past few years? What are the implications for the role of manufacturing within Eli Lilly?

2. How does each facilities option affect Lilly's cost structure, capacity management, and product development capabilities? For what type of products does the proposed flexible facility provide an efficient (i.e. low cost) manufacturing capability?

3. What type of flexibility does the "flexible facility" provide? What is the value of this flexibility to Eli Lilly? How much is Lilly paying for this flexibility?

4. Given Lilly's strategic goals in the 1990s, which option should Steve Mueller recommend? Are there other options that Lilly should be contemplating? If so, what are they?

## **SESSION 8 (Sa, Oct. 30, 8-12)**

## **OPERATIONAL HEDGING; INFORMATION TECHNOLOGY**

Assignment Due: Group Case Report - 4

Readings:  
1. Chapter 9 (Van Mieghem);  
2. Seagate Technology (Chapter 12 in Van Mieghem);  
3. ZARA: IT for Fast Fashion

Case : SEAGATE TECHNOLOGY

Case Questions:

All four discussion questions on pages 413-414 of Van Mieghem

Case: ZARA: IT FOR FAST FASHION

Case Questions:

1. How would you advise Salgado to proceed on the issue of upgrading Zara's POS systems?

- Should the company upgrade the POS terminals to a modern operating system?
- Should the company build in-store networks?
- Should the company give employees the ability to look up inventory balances for items in their own stores? In other stores?

2. What is the Zara "business model"? How is it different from the business model of other large clothing retailers? What weaknesses, if any, do you see within this business model? Is it scalable?

3. What information does Zara need to operate its business model?

4. In your opinion, what are the most important aspects of Zara's approach to information technology? Are these approaches applicable and appropriate anywhere? If not, where would they NOT work well?

5. What current or potential weaknesses (if any) do you see in Zara's IT infrastructure and IT strategy?

**SESSION 9 (F, Nov. 12, 8-12)      NEW PRODUCT DEVELOPMENT;  
INNOVATION**

Readings:                    1. Chapter 10 (Van Mieghem)  
                                  2. Creating Project Plans to Focus Product Development;  
                                  3. Medtronic  
                                  4. IDEO Product Development

Case:                         MEDTRONIC

Case Questions:

1. Review the history of how Medtronic nearly lost its position as market leader in the 1970s and 1980s. Try to chart on a piece of paper what the root causes of those outcomes were.

2. Which of the improvements in the new product development process strike you as having been particularly critical to turning the company around?

3. What do the concepts of *product line architecture* and *train schedule* mean in the pacemaker business? What are the costs and benefits of implementing these concepts? What elements of Medtronic's approach could be applied in very different business settings?

4. Evaluate the nature of senior management involvement in Medtronic's implementation of its product development system. Which elements of the system does senior management need to be intimately involved in, and which can it delegate or pay less attention to?

Case:                         IDEO PRODUCT DEVELOPMENT

Case Questions:

1. How would you characterize IDEO's process, organization, culture and management?

2. Decision point: should IDEO accept the Visor project as is (on a dramatically reduced schedule)? Should they try to persuade Handspring's management to change its aggressive launch schedule? Or should they simply decline the project? In your decisions, please consider the IDEO and Handspring perspectives.

**SESSION 10 (Sa, Nov. 13, 8-12)      INTEGRATING THE PIECES;  
SAMPLE FINAL EXAM**

Assignment Due:            Group Case Report - 5

Readings:                    1. Peapod (Chapter 13 in Van Mieghem);  
                                  2. Shouldice Hospital

Case:                         PEAPOD

Case Questions:

All five discussion questions on page 425 of Van Mieghem

Case:                         SHOULDICE HOSPITAL

Case Questions:

Please look up the Sample Final Exam on Blackboard/Assignments.

**SESSION 11 (Sa, Dec. 3, 8-12)      FINAL EXAM**

**Texas Executive MBA BA 380N: Operations Management Fall 2010 Course Outline**

<b>Session</b>	<b>Day</b>	<b>Date</b>	<b>Time</b>	<b>Topic(s)</b>	<b>Case(s)</b>	<b>Assignment Due</b>
1	Th	8/19	1-5	Process Fundamentals; Process Design	National Cranberry Coop; Benihana of Tokyo	
2	Sa	8/21	8-12	Variability; Management of Queues	Manzana Insurance	
3	Sa	9/4	8-12	Operational Fit & Focus; Process Control & Capability	Southwest; Quality Wireless (A) & (B)	Group Case Report - 1
4	F	9/17	1:30-5:30	Toyota Production System; Quality	Toyota Motor Mfg	Group Case Report - 2
5	F	10/1	8-12	Extending Just-in-Time; Global Sourcing	Barilla SpA (A); Sport Obermeyer	
6	Sa	10/2	1-5	Supply Chain Excellence; Cost Competition	SCM at World Co.; American Connector Co.	Group Case Report - 3
7	Sa	10/16	8-12	Learning & Improvement; Flexibility	ITT Automotive; Ely Lilly	
8	Sa	10/30	8-12	Operational Hedging; Information Technology	Seagate Tech; Zara: IT for Fast Fashion	Group Case Report - 4
9	F	11/12	8-12	New Product Development; Innovation	Medtronic; IDEO Product Development	
10	Sa	11/13	8-12	Integrating the Pieces; Sample Final Exam	Peapod; Shouldice Hospital	Group Case Report - 5
11	F	12/3	8-12	FINAL EXAM		